REFERENCE

INFORMATION FROM KODAK

B-401 (Aust.)

KODAK Filters

A wide range of filters is available from Kodak, and this leaflet is designed to help you to select the correct filter for your needs.

Many of them are stocked by photographic suppliers, but to assist in cases where a particular filter is not in stock, the Kodak catalogue number of each filter is listed. Using this Cat. No., any dealer with a Kodak account can order it for you.

Classes of KODAK Wratten filters and their uses.

Conversion Filters	Used to provide significant changes in color temperature of various light sources.
Light Balancing Filters	Used over the camera lens to produce subtle changes in color balance (to "cooler" or "warmer" appearance) with color films.
WRATTEN Photometric Filters	Designed primarily for visual use with a photometer to reduce color differences between illuminants operating at different color temperatures.
WRATTEN Neutral Density Filters No. 96	Used in color and black-and-white photography to reduce intensity of visible light by a definite ratio. Available in 13 densities, covering the transmittance range from 80 per cent to 0.01 percent.
Ultraviolet-Absorbing Filters	Used over the camera lens to absorb varying amounts of UV, violet, and blue radiations in black-and-white and color photography. Used also in the optical system of printers when printing on certain color materials.
Infrared Transmitting Filters (Visually Opaque)	Used as camera or light-source filters with infrared-sensitive materials for a variety of infrared photographic applications. Used also with other detectors (for burglar alarms and other monitoring devices).
Color Compensating (CC) Filters	Used in image-forming systems, singly or in combination, to change overall color balance for viewing or printing as well as to compensate for deficiencies in lighting in photographic recording.
WRATTEN Photomechanical Filters	For critical work. Selected for optical quality and uniform thickness.
Safelight Filters	Provide scientifically designed darkroom illumination compatible with the speed and spectral senstivity characteristics of sensitized materials.
POLYCONTRAST Filters	Provide contrast control for Kodak's family of variable-contrast printing papers.
Color Printing Filters (CP) (Acetate)	Used singly or in combination for color correction of enlarger light sources in color printing. *Not suitable for image-forming systems.*

KODAK Wratten Gelatin Filters

This chart lists the standard numerical designations of available KODAK WRATTEN Gelatin Filters. For a more detailed description, refer to KODAK Publication B-3, *KODAK Filters for Scientific and Technical Uses.*

Filter Color	Brief Description/Uses
Pink	
1A	Pale pink. Absorbs ultraviolet radiation.
Yellows	
2A	Pale yellow. Absorbs ultraviolet radiation.
2B	Pale yellow. Absorbs ultraviolet radiation, slightly less than No. 2A.
2E	Pale yellow. Absorbs more ultraviolet radiation than No. 2B.
3	Light yellow. Absorbs excessive sky blue.
8	Yellow.
9	Deep yellow. More dramatic effect than No. 8.
11	Yellowish-green. Corrects panchromatic film rendition to match tungsten impression of scene.
12	Deep yellow. Minus blue filter (see No. 32 for minus-green and No. 44A for minus-red)
15	Deep yellow. Darkens sky in landscape photography.
Oranges and Reds	
16	Yellow-orange. Greater overcorrection of sky than No. 15.
21	Orange. Contrast filter for blue and blue-green absorption.
22	Deep orange. Contrast filter, greater effect than No. 21.
23A	Light red. Greater green absorption than Nos. 21 or 22.
25	Red tricolor. Color separation work, tricolor printing, and infrared photography.
26	Red. For 3-D anaglyph viewing.
29	Red. Color separation with Nos. 47 and 61 and tricolor printing work.
Magentas and Violets	
32	Magenta. Minus-green (No. 12 is minus-blue, No. 44A is minus-red).
33	Magenta. Contrast filter for strongest green absorption.
34A	Violet. For minus-green and plus-blue separation.
Blues and Greens	
38A	Blue. Absorbs red, some UV and green light.
44	Light blue-green. Minus-red filter with much UV absorption.
44A	Light blue-green. Minus-red (No. 12 is minus-blue, and No. 32 is minus-green)
47	Blue tricolor. Color separation work with Nos. 29 and 61.
47B	Deep blue tricolor. Color separation and tricolor work.
Greens	
58	Green tricolor. Color separation and tricolor printing.
61	Deep green tricolor. Tricolor work with Nos. 29 and 47.
Narrow-Band	
70	Dark red. Monochromat used for three-color printing on color work.
74	Dark green monochromat.
Photometric—Designed primarily for visual use with photometers to reduce color differences caused by light sources of different color temperatures.	
80A, 80B, 80C, 80D—Blue series of conversion filters for use with color films..	
85, 85N3, 85N6, 85B, 85C—Amber series of conversion filters for use with color films.	
Light Balancing	
81, 81A, 81B, 81C, 81D, 81EF—Yellowish series of light-balancing filters.	
82, 82A, 82B, 82C—Bluish series of light-balancing filters.	
Miscellaneous	
87, 88A—Visibly opaque infrared filter.	
89B	Visibly opaque. Infrared photography, especially aerial.
90	Dark grayish amber. Monochrome viewing filter.
96	Neutral Density Filter No. 96
102	Yellow-green. Converts barrier-layer photocell response to eye luminosity response.
106	Amber. Converts an S-4 type photocell response to the eye luminosity response.

All filters are size 75mm square unless stated otherwise.

KODAK WRATTEN Filters (Gelatin)

Ultraviolet absorbers

Type	Cat. No.
1A	1495423*
2A	1703909*
2B	1495431
2E	1760875*

Orange & Red

Type	Cat. No.
21	1495563
22	1495571
23A	1495589
25	1495605
26	1495613
29	1495621
70	1495936
92	1769348*

Magenta & Violet

Type	Cat. No.
32	1495654*
33	1495662*
34A	1495688

Yellow & Yellow-Green

Type	Cat. No.
3	1495464
8	1495498
9	1495506
11	1495514*
12	1495522
15	1495548
16	1495555*

Blue & Blue-Green

Type	Cat. No.
38A	1495720*
44	1495746
44A	1495753
47	1495787*
47B	1495795
98	1496298*

Green

Type	Cat. No.
58	1495860
61	1495894*
74	1495969
99	1496306

Light-balancing, Yellowish

Type	Cat. No.
81	1496058
81A	1496066
81B	1496074
81C	1496082
81D	1496090
81EF	1496108*

Light-balancing, Bluish

Type	Cat. No.
82	1496116
82A	1496124
82B	1496132
82C	1496140

Miscellaneous

Type	Cat. No.
87	1496256
87C	1704030*
88A	1496264*
89B	1496272
90	1496280
102	1704048*
106	1704055*

KODAK Conversion Filters, (Gelatin)

Type	Cat. No.
80A	1840867
80B	1496041
80C	1535707
80D	1840883
85	1496165
85B	1496173
85C	1496181
85N3	1496199*
85N6	1496207*

KODAK Color Compensating Filters, (Gelatin)

Yellow

Type	Cat. No.
CC05Y	1496769
CC10Y	1496777
CC20Y	1496785
CC25Y	170 4121*
CC30Y	1496793
CC40Y	1496801
CC50Y	1496819

Magenta

Type	Cat. No.
CC05M	1496645
CC10M	1496652
CC20M	1496660
CC25M	1704105*
CC30M	1496678
CC40M	1496686
CC50M	1496694

Cyan

Type	Cat. No.
CC05C	1496520
CC10C	1496538
CC20C	1496546
CC30C	1496553
CC40C	1496561*
CC50C	1496579

Red

Type	Cat. No.
CC05R	1496702
CC10R	1496710
CC20R	1496728
CC30R	1496736
CC40R	1496744
CC50R	1496751

Green

Type	Cat. No.
CC05G	1496587
CC10G	1496595
CC20G	1496603
CC30G	1496611
CC40G	1496629*
CC50G	1496637*

Blue

Type	Cat. No.
CC05B	1496462
CC10B	1496470
CC20B	1496488*
CC30B	1496496*
CC40B	1496504*
CC50B	1496512*

KODAK WRATTEN Neutral Density Filter No. 96, (Gelatin)

Density	% Trans mission	Cat. No.
0.10	80.0	149 6314
0.20	63.0	149 6322
0.30	50.0	149 6330
0.40	40.0	149 6348
0.50	32.0	149 6355
0.60	25.0	149 6363
0.70	20.0	149 6371*
0.80	16.0	149 6389*
0.90	13.0	149 6397
1.00	10.0	149 6405
2.00	1.0	149 6413
3.00	0.10	149 6421
4.00	0.010	149 6439

KODAK WRATTEN Photo Mechanical Filters (Gelatin)

Type	Cat. No.
PM23A	1569995*
PM25	1534288*
PM29	1496835*
PM33	1496843*
PM47	1570001*
PM47B	1496850*
PM58	1496868*
PM85	1831577*
PM85B	1557461*

KODAK Color Printing Filters (Acetate), 25mm square (single pack)

Magenta

Type	Cat. No.
CP05M	1544709*
CP10M	1544717
CP20M	1544725
CP40M	1544733

Red

Type	Cat. No.
CP05R	1551639*
CP10R	1551647*
CP20R	1551654*
CP40R	1551662*

Yellow

Type	Cat. No.
CP05Y	1544741
CP10Y	1544758
CP20Y	1544766
CP40Y	1544774

KODAK Color Printing Filters (Acetate), 125mm square (single pack)

Cyan (for use in filter packs)

Type	Cat. No.
CP025C-2	1431899
CP05C-2	1431915
CP10C-2	1431931*
CP20C-2	1431956
CP40C-2	1431212

Ultraviolet Absorber

KODAK Color Printing Filters (Acetate), 150mm square (single pack)

Magenta

Type	Cat. No.
CP05M	1544832
CP10M	1544840
CP20M	1544857
CP40M	1544865*

Red

Type	Cat. No.
CP05R	1551670
CP10R	1551688
CP20R	1551696*
CP40R	1551704*

Yellow

Type	Cat. No.
CP10Y	1544881
CP20Y	1544899*

Cyan (for use in filter packs)

Type	Cat. No.
CP05C-2	1431998*
CP10C-2	1432004*
CP20C-2	1432020*
CP40C-2	1432046*

Ultraviolet Absorber

Type	Cat. No.
CP2B	1544782*

KODAK POLYCONTRAST FILTERS (Polyester)

Type	Cat. No.
Filter Set 90 x 90mm	350 8975
Filter Set 150 x 150mm	351 6945
Filter Kit 63 x 63 mm	350 7498

KODAK Gelatin Filter Frame & Holders

Type	Cat. No.
Frame, 75mm square	148 6638
Holder, Series 6, 50mm square	148 6653
Holder, Series 8, 75mm square	148 6661

KODAK Ultraviolet Transmitting Filter No. 18A. (Glass only).

50mm (2 Inch) Part No. 840447

75mm (3 Inch) Part No. 840449

(Please note that No. 18A filters have a Part No. instead of a Cat. No.).

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*Items shown with Asterisk are not stocked in Australia but are available to firm indent order.

KODAK SAFELIGHT HOUSINGS

KODAK Utility Safelight

A versatile safelight that can provide either direct or indirect illumination. Brackets enable either wall or table top attachment, while the provision of four chain hook attachment, together with two threaded wing nuts and washers enable safe ceiling suspension.

	Cat. No.
KODAK Utility Safelight 25cm x 30cm	441 2367

KODAK Beehive Safelight

Use a 14cm diameter circular safelight filter, which can be changed easily by removal of the threaded black plastic base. The dull yellow cone is fitted with a B.C. socket and a 1.3m 2-core lead. By using the U-bracket supplied, this unit can be fitted to a workbench, shelf or wall, or can be suspended from the ceiling of the darkroom. One 25-watt pearl lamp is recommended for the Beehive safelight.

KODAK Beehive Safelight	302 3827

KODAK Pyramid Safelight 20.5 x 25.4cm

An improved pyramid safelight housing consisting of a sturdy all metal housing with an exterior grey hammertone finish, and a white glossy interior. The 20.5 x 25.4cm filter slot is painted a non-reflective matte black, with a felt lining on the hinged front end.
Four upper and four lower eye hooks are provided for chain attachment while a series of 6mm I.D. openings ensure suitable ventilation.

KODAK Pyramid Safelight (1 Filter) 20cm x 25cm	402 5300
KODAK Pyramid Double Safelight (2 Separate filters) 20cm x 25cm	402 5383
KODAK Pyramid Triple Safelight (3 Separate filters) 20cm x 25cm	402 5326

KODAK Safelight Filters

Scientifically designed for safelight lamps. Provide maximum safe illumination plus protection from white light when using sensitized materials.
OA (greenish yellow) - For black-and-white contact and duplicating materials, including KODALITE Films.
OC (light amber) - For contact and enlarging papers, including KODALITE Films.
No. 1A (light red) - For KODALITH ULTRATEC and KODAGRAPH orthochromatic materials.
No. 2 (dark red) - For orthochromatic materials, and some LINAGRAPH Papers.
No. 3 (dark green) - For panchromatic materials.
No. 13 - KODAK EKTACOLOR and PANALURE Papers.

Filter Type	14cm dia. (5 1/2 inch)	13 x 18cm (5 x 7 inch)	20 x 25cm (8 x 10 inch)	25 x 30cm (10 x 12 inch)
OA	1521491	1521376	1521582	1521681
OC	1521483*	–	1521590	1521681
No. 1	1521509	1521392*	1521608	1521707*
No. 1A	1521517	1521400	1521616	1521715
No. 2	–	1521418*	1521624	1521723
No. 3	–	1521426*	1521632	1521731*
No. 13	1796689	–	1796705	1796721

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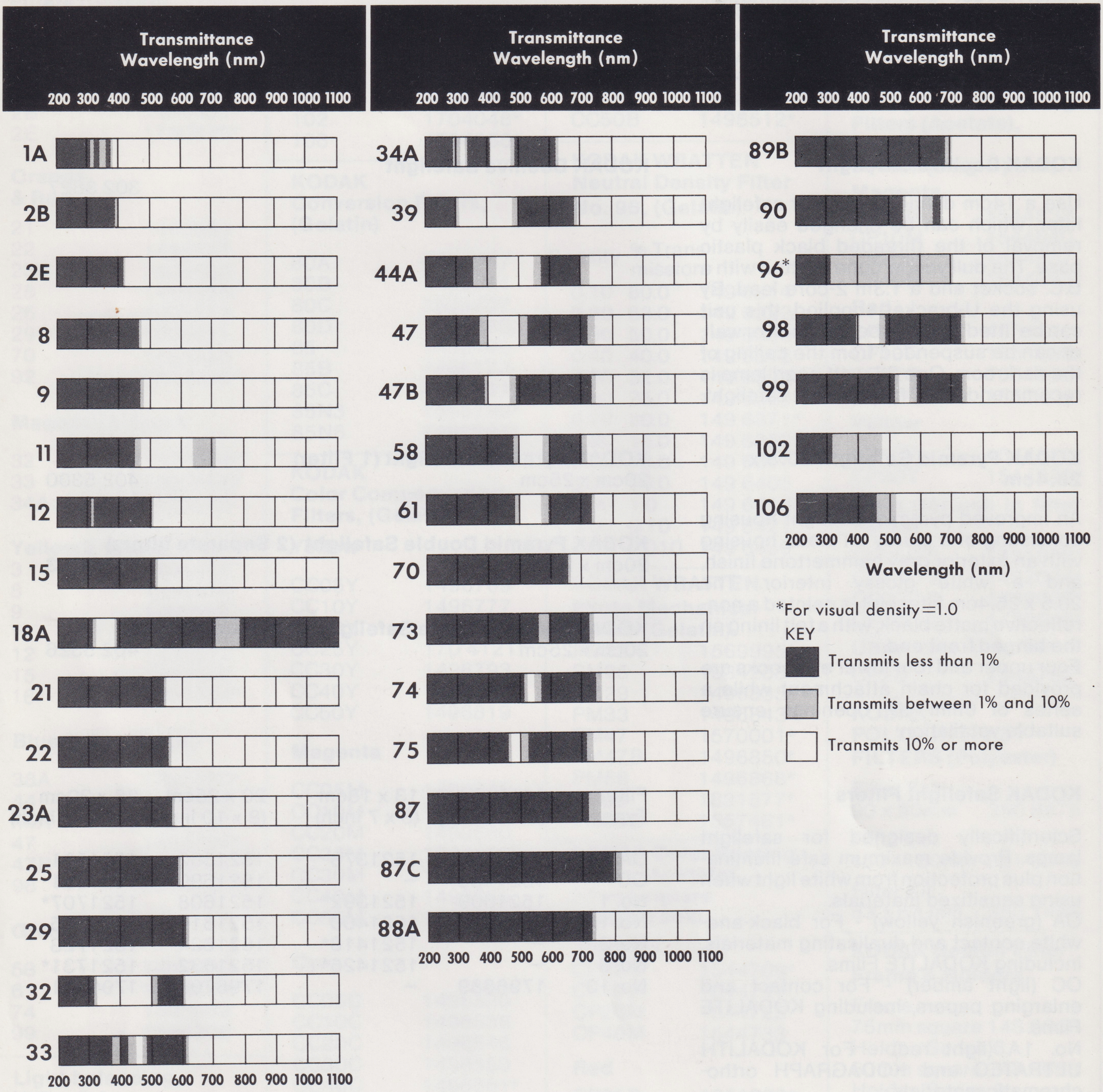
SPECTRAL-TRANSMITTANCE BAR CHARTS
for Selected KODAK WRATTEN Filters



*For visual density=1.0

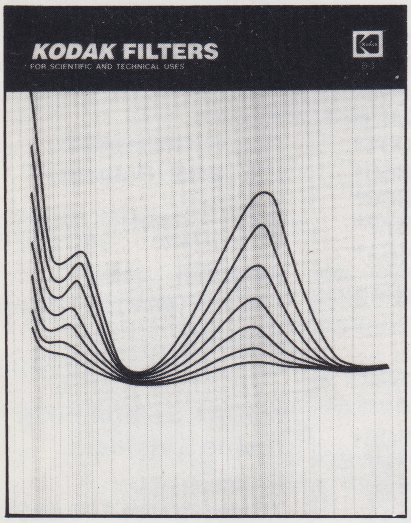
KEY

- ■ Transmits less than 1%
- ▨ Transmits between 1% and 10%
- ☐ Transmits 10% or more

COLOR TEMPERATURE CONVERSION CHART

LIGHT SOURCE	Color Temperature °K	Film Type Daylight Type S	 3400°K Type A	 3200°K Tungsten Type L
		Kodak Wratten Filter		
75 Watt Incandescent Bulb	2800	80A +82C	82A+82C	82C
100 Watt Incandescent Bulb	2900	80A+82B	80D	82B
200, 500 or 1000 Watt Incandescent Bulb	3000	80A+82A	82C	82A
Sunlight-Sunrise & Sunset	2-3000	80A+82	82B	82
3200°K and Quartz Iodine Professional Lights	3200	80A	82A	NONE
Photolamp	3400	80B	NONE	81A
Sunlight-1 Hour before sunset or after sunrise	3600	80C+82A	81A	81C
Sunlight-2 Hours before sunset or after sunrise	4000	82A+82C	81D	81+81EF
Blue Flood/lamps	4900	82A	81+85C	85
Carbon Arcs - white flame	5200	82	81A+85C	85+81
Blue Flash or Standard Sunlight	5500	NONE	85	85B
Electronic Flash	6100	81A	85B	N.R.
Overcast Sky	6-7000	81D	N.R.*	N.R.
Sunlight-Hazy (Open Shade)	7-10000	85C	N.R.	N.R.
Sunlight-Clear (Open Shade)	8-12000	81A+85C	N.R.	N.R.
Summer Skylight (Blue sky only)	From 9500-30000	86	N.R.	N.R.

*N.R. = Not Recommended



'KODAK Filters for Scientific and Technical Uses', Publication No B-3, 92 pages, softbound (CAT. No. 152 8108). This is a comprehensive guide to the entire range of Kodak Wratten filters. Available from your photo dealer or direct from Kodak.

Kodak Filters
Kodak Pamphlet B-401 (Aust.)

Consumer Products Division.
KODAK (Australasia) PTY. LTD.
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Major Revision 8-89B

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